

1644

RAW SEQUENCE LISTING DATE: 05/04/2000 PATENT APPLICATION: US/09/183,972A TIME: 13:19:57

Input Set : A:\Uia02701.app

Output Set: C:\CRF3\REFHOLD\05042000\I183972A.raw

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3 <110> APPLICANT: Hageman, Gregory S.

4 Kuehn, Markus H.

6 <120> TITLE OF INVENTION: THERAPEUTICS AND DIAGNOSTICS FOR OCULAR DISEASE BASED

7 ON A NOVEL HUMAN GENE FAMILY

9 <130> FILE REFERENCE: UIA-027.01

11 <140> CURRENT APPLICATION NUMBER: 09/183,972A

12 <141> CURRENT FILING DATE: 1998-10-29

14 <160> NUMBER OF SEQ ID NOS: 49

16 <170> SOFTWARE: Patentin Ver. 2.0
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Does Not Comply
Corrected Diskette Needed

ERRORED SEQUENCES

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862 <210> SEQ ID NO: 6
863 <211> LENGTH: 1241
864 <212> TYPE: PRT
865 <213> ORGANISM: Homo sapiens
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871 Phe Val Leu Ile Glu Gly Asp Phe Pro Ser Leu Thr Ala Gln Thr Tyr 872 20 25 30
874 Leu Ser Ile Glu Glu Ile Gln Glu Pro Lys Ser Ala Val Ser Phe Leu
875 35
                                    40
877 Leu Pro Glu Glu Ser Thr Asp Leu Ser Leu Ala Thr Lys Lys Gln 878 \phantom{000}55\phantom{000} 60
880 Pro Leu Asp Arg Arg Glu Thr Glu Arg Gln Trp Leu Ile Arg Arg Arg 881 65 70 75 80
883 Arg Ser Ile Leu Phe Pro Asn Gly Val Lys Ile Cys Pro Asp Glu Ser
884 85 90 95
886 Val Ala Glu Ala Val Ala Asn His Val Lys Tyr Phe Lys Val Arg Val
887 100 105 110
889 Cys Gln Glu Ala Val Trp Glu Ala Phe Arg Thr Phe Trp Asp Arg Leu
890 115 120 125
                                                           125
892 Pro Gly Arg Glu Glu Tyr His Tyr Trp Met Asn Leu Cys Glu Asp Gly 893 130 135 140
895 Val Thr Ser Ile Phe Glu Met Gly Thr Asn Phe Ser Glu Ser Val Glu 896 145 150 155 160
898 His Arg Ser Leu Ile Met Lys Lys Leu Thr Tyr Ala Lys Glu Thr Val
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901 Ser Ser Ser Glu Leu Ser Ser Pro Val Pro Val Gly Asp Thr Ser Thr
902 180
904 Leu Gly Asp Thr Thr Leu Ser Val Pro His Pro Glu Val Asp Ala Tyr
905 195 200 205
907 Glu Gly Ala Ser Glu Ser Ser Leu Glu Arg Pro Glu Glu Ser Ile Ser
908 210 215 220
910 Asn Glu Ile Glu Asn Val Ile Glu Glu Ala Thr Lys Pro Ala Gly Glu
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911	225					230					235					240
913	Gln	Ile	Ala	Glu	Phe	Ser	Ile	His	Leu	Leu	Gly	Lys	Gln	Tyr	Arg	Glu
914					245					250					255	
916	Glu	Leu	Gln	Asp	Ser	Ser	Ser	Phe	His	His	Gln	His	Leu	Glu	Glu	Glu
917				260					265					270		
919	Phe	Ile	Ser	Glu	Val	Glu	Asn	Ala	Phe	Thr	Gly	Leu	Pro	Gly	Tyr	Lys
920			275					280					285			
922	Glu	Ile	Arg	Val	Leu	Glu	Phe	Arg	Ser	Pro	Lys	Glu	Asn	Asp	Ser	Gly
923		290					295		,			300				
925	Val	Asp	Val	Tyr	Tyr	Ala	Val	Thr	Phe	Asn	Gly	Glu	Ala	Ile	Ser	Asn
926						310					315					320
928	Thr	Thr	\mathtt{Trp}	Asp	Leu	Ile	Ser	Leu	His	Ser	Asn	Lys	Val	Glu	Asn	His
929					325					330					335	
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932				340					345					350		
	Asn	Phe		Asp	Tyr	Ile	Ala		Thr	Leu	Gln	Gln		Phe	Leu	Leu
935			355			•		360					365			
	Gly		Ser	Ser	Leu	Asn		Asp	Pro	Asp	Ser	Leu	Gln	Leu	Ile	Asn
938		370					375					380				
		Arg	Gly	Val	Leu		His	Gln	Thr	Glu		Leu	Val	Trp	Asn	
941	385					390					395					400
	Gln	Ser	Ser	Ser		Gln	Ala	Thr	Pro		Ser	Ile	Leu	Asp	Asn	Thr
944					405	_	_			410					415	
	Phe	GIn	Ala		Trp	Pro	Ser	Ala		Glu	Ser	Ile	Thr		Ser	Ile
947				420	~1		~	٠.	425	_	_			430	_	
	Pro	Pro		Asp	Pne	ser	Ser		Pro	Pro	Ser	Ala		GTA	Arg	GLu
950	T	·	435	a1	a	D-1-	.	440		+		a	445			• .
952	Leu		ser	GIU	ser	Pro		GTĀ	Asp	Leu	vaı		Thr	HIS	ГЛа	Leu
	11-	450	Dwa	Com	f	Wat	455	T	C = m	C		460	01	17. 1	T	a1
	465	Pne	PIO	ser	гуу	470	GIY	Leu	ser	ser	475	Pro	GIU	Val	Leu	480
		Car	Car	Lou	Πh∽		uic	C07	77 2 1	Πh∽		111	17-1	Tan	Gln	
959	Val	ser	261	neu	485	Бец	птэ	ser	Val	490	PIO	мта	Val	neu	495	THE
	Clv	T.ou	Dro	Va 1		Car	Glu	Clu	λνα		Sor	Clv	Car	Uie	Leu	Val
962	011	DÇu		500	2114	001	Olu	014	505	1111	DCI	OLY	561	510	Deu	Val
	G1 ii	Asp	Glv		Ala	Asn	Va 1	G1u		Ser	Glu	Asp	Phe		Ser	Tle
965			515					520	014		O.L.u	p	525	Deu	001	110
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968		530					535					540		-,,		
970	Ile	Pro	Ser	Met	Glu	Asp	Ser	asp	Val	Ser	Leu	Thr	Ser	Ser	Pro	Tvr
	545					550					555					560
973	Leu	Thr	Ser	Ser	Ile	Pro	Phe	Gly	Leu	Asp	Ser	Leu	Thr	Ser	Lys	Val
974					565			-		570					575	
976	Lys	Asp	Gln	Leu	Lys	Val	Ser	Pro	Phe	Leu	Pro	Asp	Ala	Ser	Met	Glu
977	-	-		580	-				585			-		590		
979	Lys	Glu	Leu	Ile	Phe	Asp	Gly	Gly	Leu	Gly	Ser	Gly	Ser	Gly	Gln	Lys
980			595			_	_	600		_		-	605	-		-
982	Val	Asp	Leu	Ile	Thr	Trp	Pro	Trp	Ser	Glu	Thr	Ser	Ser	Glu	Lys	Ser
983		610					615					620				

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985 Ala Glu Pro Leu Ser Lys Pro Trp Leu Glu Asp Asp Asp Ser Leu Leu 986 625 630 635 986 625 988 Pro Ala Glu Ile Glu Asp Lys Lys Leu Val Leu Val Asp Lys Met Asp 989 645 650 655 991 Ser Thr Asp Gln Ile Ser Lys His Ser Lys Tyr Glu His Asp Asp Arg 992 660 665 670 994 Ser Thr His Phe Pro Glu Glu Glu Pro Leu Ser Gly Pro Ala Val Pro 995 675 680 685 997 Ile Phe Ala Asp Thr Ala Ala Glu Ser Ala Ser Leu Thr Leu Pro Lys 998 690 695 700 1000 His Ile Ser Glu Val Pro Gly Val Asp Asp Cys Ser Val Thr Lys Ala 1001 705 710 715 720 1003 Pro Leu Ile Leu Thr Ser Val Ala Ile Ser Ala Ser Thr Asp Lys Ser 1004 725 730 735 1006 Asp Gln Ala Asp Ala Ile Leu Arg Glu Asp Met Glu Gln Ile Thr Glu 1007 740 745 7501009 Ser Ser Asn Tyr Glu Trp Phe Asp Ser Glu Val Ser Met Val Lys Pro 1010 755 760 765 1012 Asp Met Gin Thr Leu Trp Thr Ile Leu Pro Glu Ser Glu Arg Val Trp 1013 770 780 1015 Thr Arg Thr Ser Ser Leu Glu Lys Leu Ser Arg Asp Ile Leu Ala Ser 1016 785 790 795 800 1018 Thr Pro Gln Ser Ala Asp Arg Leu Trp Leu Ser Val Thr Gln Ser Thr 1019 805 810 815 1021 Lys Leu Pro Pro Thr Thr Ile Ser Thr Leu Leu Glu Asp Glu Val Ile 1022 820 825 830 1024 Met Gly Val Gln Asp Ile Ser Leu Glu Leu Asp Arg Ile Gly Thr Asp 1025 835 840 845 1027 Tyr Tyr Gln Pro Glu Gln Val Gln Glu Gln Asn Gly Lys Val Gly Ser 1028 850 855 860 1030 Tyr Val Glu Met Ser Thr Ser Val His Ser Thr Glu Met Val Ser Val 1031 865 870 875 880 1033 Ala Trp Pro Thr Glu Gly Gly Asp Asp Leu Ser Tyr Thr Gln Thr Ser 1034 885 890 895 1036 Gly Ala Leu Val Val Phe Phe Ser Leu Arg Val Thr Asn Met Met Phe 1037 900 905 910 1039 Ser Glu Asp Leu Phe Asn Lys Asn Ser Leu Glu Tyr Lys Ala Leu Glu 1040 915 920 925 1042 Gln Arg Phe Leu Glu Leu Leu Val Pro Tyr Leu Gln Ser Asn Leu Thr 1043 930 935 940 1045 Gly Phe Gln Asn Leu Glu Ile Leu Asn Phe Arg Asn Gly Ser Ile Val 1046 945 950 955 960 1048 Val Asn Ser Arg Met Lys Phe Ala Asn Ser Val Pro Pro Asn Val Asn 1049 965 970 975 1051 Asn Ala Val Tyr Met Ile Leu Glu Asp Phe Cys Thr Thr Ala Tyr Asn 1052 980 985 990 1054 Thr Met Asn Leu Ala Ile Asp Lys Tyr Ser Leu Asp Val Glu Ser Gly 1055 995 1000 1005 1057 Asp Glu Ala Asn Pro Cys Lys Phe Gln Ala Cys Asn Glu Phe Ser Glu

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	1058	1015				1020														
	1060	Cys	Leu	Val	Asn	Pro	Trp	Ser	Gly	Glu	Ala	Lys	Cys	Arg	Cys	Phe	Pro			
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	1063	Gly	Tyr	Leu	Ser	Val	Glu	Glu	Arq	Pro	Cys	Gln	Ser	Leu	Cvs	Asp	Leu			
	1064	-	-			1045				1050					1055					
	1066	Gln	Pro	Asp	Phe	Cys	Leu	Asn	Asp	Gly	Lys	Cys	Asp	Ile	Met	Pro	Gly			
	1067									1070										
	1069	His	Gly	Ala	Ile	Cys	Arg	Cys	Arg	Val	Gly	Glu	Asn	Trp	Trp	Tyr	Arg			
	1070 1075						1080					1085								
	1072				Cys	Glu				Ser	Glu			Ile	Ile	Gly	Ile			
	1073		1090			1095						1								
	1075		Ile	Ala	Ser			Gly	Leu	Leu			Phe	Ser	Ala					
E>	·-> 1076 / 105				1110					_	1115	1120								
	1078	Tyr	Phe	Phe				Leu	Gln			His	Asp	Arg			Arg			
	1079		_	_		1125		_	_		L130			_	_	1135				
	1081	GLu	Ser			Ser	GLY	Ser			Gln	Pro	Asp	Ser			Ser			
	1082	T1 -	a1	_	L140	**- 3	*	m		1145			~1		1150	-				
	1084 1085	тте			АТА	Val	гāг			Pro	vai	туг			His	Arg	Ala			
	1085 1155 1087 Gly Cys Glu Lys				m	C1		160	M	n	C1	_	1165	D1	m	a				
	1088		L170	GIU	цуѕ	TYL		L175	PLO	туг	PIQ		1180	PLO	Pne	TYL	ser			
				Car	Clv	Acn			C111	C117	ton	_		Clu	Clu	T10	1 ~~			
F>	1090 Ser Ala Ser Gly 1091/185						1190	116	GTÅ	GTÄ		1195	1200							
L ,			Mot	ጥኒፖን	Glu			Glu	Lau	Sor			Clu	T10	Cln					
	1093 Gln Met Tyr Glu 1094					.205				1210					1215					
	1096	Met	Ara	Va l	-		Len	TVT	Ala			Pro	Glu	Phe			Phe			
	1097		5		1220			-1-		1225			0.2.4		1230					
				_					_							-				
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VERIFICATION SUMMARY

DATE: 05/04/2000 PATENT APPLICATION: US/09/183,972A TIME: 13:19:58

Input Set : A:\Uia02701.app

Output Set: C:\CRF3\REFHOLD\05042000\I183972A.raw

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L:1061 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:6
M:332 Repeated in SeqNo=6
L:1132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:1167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:1184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:1616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:1642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47
L:1677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49

STATISTICS SUMMARY PATENT APPLICATION: US/09/183,972A

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Input Set : A:\Uia02701.app

Output Set: C:\CRF3\REFHOLD\05042000\I183972A.raw

Application Serial Number: US/09/183,972

Alpha or Numeric: Numeric Application Class: 536 Application File Date: 10-29-1998

Art Unit: 1644
Software Application: PatentIn Total Number of Sequences: 49

Number of Errors: 3 Number of Warnings: 10 Number of Corrections: 0

MESSAGE SUMMARY

332 E: 3 ((32) Invalid/Missing Amino Acid Numbering) 341 W: 10 ((46) "n" or "Xaa" used)